

**Notice of Allowability**

Application No.

10/822,549

Applicant(s)

HOWELL, FRANK A.

Examiner

Ruth C. Rodriguez

Art Unit

3677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to communication filed on 16 August 2007.

2. ☒ The allowed claim(s) is/are 1, 9, 11, 13-15 and 19.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some\* c) ☐ None of the:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.

(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_

4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_

7. ☐ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other \_\_\_\_\_

## REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

For claim 1, Dillin discloses a buckle (A) is used with a flexible strap (E) having a substantially uniform width and thickness and end tab of increased thickness (Figs. 1 and 3). The buckle captures and releasably retains the end tab (Figs. 1 and 3). The buckle comprises a base (lower surface as seen in Fig. 4), parallel side walls (side surface as seen in Fig. 4), first slots (B,D) and flanges (upper surface as seen in Fig. 4). The side walls extend upwardly to cooperate therewith in defining an open-ended receiving channel having an entry end (right end of H) and an exit end (left end of H). The first slots extend transversely across the base (Figs. 1-4). The buckle is attached to the strap by weaving the strap into and out of the channel through the first slots (Figs. 1 and 3). The flanges are spaced vertically from the base and extend inwardly in cantilever fashion from the side walls to define an open-ended second slot communicating with and extending along the length of the receiving channel (Figs. 1-4). The second slot allows longitudinal pinching and lateral insertion of the strap into the receiving channel. The flanges have undersides and jamming surfaces. The undersides receive the end tab in the receiving channel via the strap entry end and to releasably wedge the end tab in and prevent withdrawal of the end tab from the receiving channel via the exit end (Figs. 1, 2 and 9). The jamming surfaces slopes inwardly into the receiving channel and extending from the entry end of the receiving

channel towards stop surfaces to accommodate lateral insertion and longitudinal pinching (Figs. 1-4). Dillin fails to disclose that the flanges have converging sections leading from a maximum width of the slot at the entry end of the receiving channel to a reduced width of the slot at an intermediate location along the length of the channel and non-sloping surfaces that extend from the stop surfaces towards the exit of the receiving channel to releasably wedge the end tab within the receiving channel. However, Mullikin discloses a buckle (B) is used with a flexible strap (C) having a substantially uniform width and thickness and end tab (knot) of increased thickness (Figs. 1 and 2). The buckle captures and releasably retains the end tab (Figs. 1 and 2). The buckle comprises a base (A'), parallel side walls (A2) and flanges (A3). The side walls extend upwardly to cooperate therewith in defining an open-ended receiving channel having an entry end (lower end of the buckle as shown in Figs. 1-3) and an exit end (upper end of the buckle as shown in Figs. 1-3). The flanges are spaced vertically from the base and extend inwardly in cantilever fashion from the side walls to define an open-ended slot communicating with and extending along the length of the receiving channel (Figs. 1-4). The flanges have converging sections leading from a maximum width of the slot at the entry end of the receiving channel to a reduced width of the slot at an intermediate location along the length of the channel (Figs. 1-3). The converging sections of the flanges allow easier insertion of the end tab into the buckle (Page 1, lines 60-91). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the flanges with converging sections leading from a maximum width of the slot at the entry end of the receiving channel to a reduced width

of the slot at an intermediate location along the length of the channel as taught by Mullikin in the buckle disclosed by Dillin. Still, Dillin and Mullikin fail to disclose that the flanges have non-sloping surfaces that extend from the stop surfaces towards the exit of the receiving channel to releasably wedge the end tab within the receiving channel. Accordingly, it would not have been obvious to one having ordinary skill in the art at the time of Applicant's invention to provide the flanges with non-sloping surfaces that extend from the stop surfaces towards the exit of the receiving channel to releasably wedge the end tab within the receiving channel that will securely hold the end tabs since Dillin relies only in sloping surfaces to releasably wedge the end tab.

Regarding claim 9, Dillin discloses a buckle (A) is used with a flexible strap (E) having a substantially uniform width and thickness and end tab of increased thickness (Figs. 1 and 3). The buckle captures and releasably retains the end tab (Figs. 1 and 3). The buckle comprises a base (lower surface as seen in Fig. 4), parallel side walls (upper surface as seen in Fig. 4) and flanges (upper surface as seen in Fig. 4). The side walls extend upwardly from the base to cooperate therewith in defining an open-ended receiving channel (Figs. 1-4). The flanges are spaced vertically from the base and extend inwardly from the side walls to define an open-ended slot communicating with the receiving channel (Figs. 1-4). The flanges have converging sections leading from one end of the slot to an intermediate location along the length thereof (Figs. 1-4). The slot allows longitudinal pinching and lateral insertion of the strap into the receiving channel (Figs. 1-4). The flanges have undersides with downwardly sloping jamming surfaces configured to frictionally retain the end tab in the receiving channel (Figs. 1-4).

The jamming surfaces slopes inwardly into the receiving channel and extending from the entry end of the receiving channel towards stop surfaces to accommodate lateral insertion and longitudinal pinching (Figs. 1-4). Dillin fails to disclose that the flanges have converging sections leading from a maximum width of the slot at the entry end of the receiving channel to a reduced width of the slot at an intermediate location along the length of the channel and non-sloping surfaces that extend from the stop surfaces towards the exit of the receiving channel to releasably wedge the end tab within the receiving channel. However, Mullikin discloses a buckle (B) is used with a flexible strap (C) having a substantially uniform width and thickness and end tab (knot) of increased thickness (Figs. 1 and 2). The buckle captures and releasably retains the end tab (Figs. 1 and 2). The buckle comprises a base (A'), parallel side walls (A2) and flanges (A3). The side walls extend upwardly to cooperate therewith in defining an open-ended receiving channel having an entry end (lower end of the buckle as shown in Figs. 1-3) and an exit end (upper end of the buckle as shown in Figs. 1-3). The flanges are spaced vertically from the base and extend inwardly in cantilever fashion from the side walls to define an open-ended slot communicating with and extending along the length of the receiving channel (Figs. 1-4). The flanges have converging sections leading from a maximum width of the slot at the entry end of the receiving channel to a reduced width of the slot at an intermediate location along the length of the channel (Figs. 1-3). Still, Dillin and Mullikin fail to disclose that the flanges have non-sloping surfaces that extend from the stop surfaces towards the exit of the receiving channel to releasably wedge the end tab within the receiving channel. Accordingly, it would not have been obvious to

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one having ordinary skill in the art at the time of Applicant's invention to provide the flanges with non-sloping surfaces that extend from the stop surfaces towards the exit of the receiving channel to releasably wedge the end tab within the receiving channel that will securely hold the end tabs since Dillin relies only in sloping surfaces to releasably wedge the end tab.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth C. Rodriguez whose telephone number is (571) 272-7070. The examiner can normally be reached on M-F 07:15 - 15:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on (571) 272-7075.

Submissions of your responses by facsimile transmission are encouraged. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-6640.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/RCR/  
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Art Unit 3677

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rcr  
October 29, 2007